

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/10289

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/37 C12N15/80 C12N9/16 C12N15/82

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

BIOSIS, EPO-Internal, FSTA, EMBASE, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>MARATHE S ET AL: "DUPLICATION-INDUCED MUTATION OF A NEW NEUROSPORA GENE REQUIRED FOR ACETATE UTILIZATION PROPERTIES OF THE MUTANT AND PREDICTED AMINO ACID SEQUENCE OF THE PROTEIN PRODUCT" MOLECULAR AND CELLULAR BIOLOGY, vol. 10, no. 6, 1990, pages 2638-2644, XP009026209 ISSN: 0270-7306 figure 5 -& DATABASE SWISS-PROT 'Online! 1 November 1997 (1997-11-01) "Acetyl-CoA hydrolase (EC 3.1.2.1) (Acetyl-CoA deacylase) (Acetyl-CoA acylase) (Acetate utilization protein)" retrieved from SWISS-PROT Database accession no. P15937 XP002270718 the whole document</p> <p style="text-align: center;">-/-</p>	1-18, 21, 22

☒ Further documents are listed in the continuation of box C.☐ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

18 February 2004

Date of mailing of the international search report

04/03/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>-----</p> <p>CONNERTON I F ET AL: "AN ACETATE-SENSITIVE MUTANT OF NEUROSPORA-CRASSA DEFICIENT IN ACETYL-COA HYDROLASE"</p> <p>JOURNAL OF GENERAL MICROBIOLOGY, vol. 138, no. 9, 1992, pages 1797-1800, XP001179486</p> <p>ISSN: 0022-1287</p> <p>the whole document</p>	1-18, 21, 22
A	<p>-----</p> <p>MALMBERG LI-HONG ET AL: "Identification of rate-limiting steps in cephalosporin C biosynthesis in Cephalosporium acremonium: A theoretical analysis"</p> <p>APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, vol. 38, no. 1, 1992, pages 122-128, XP009026197</p> <p>ISSN: 0175-7598</p> <p>cited in the application</p>	
A	<p>-----</p> <p>SHEN Y-Q ET AL: "LEVELS OF ISOPENICILLIN N SYNTHETASE AND DEACETOXYCEPHALOSPORIN C SYNTHETASE IN CEPHALOSPORIUM-ACREMONIUM PRODUCING HIGH AND LOW LEVELS OF CEPHALOSPORIN C"</p> <p>BIO-TECHNOLOGY (NEW YORK), vol. 4, no. 1, 1986, pages 61-62, 64, XP009026198</p> <p>ISSN: 0733-222X</p>	
A	<p>-----</p> <p>SKATRUD P L ET AL: "USE OF RECOMBINANT DNA TO IMPROVE PRODUCTION OF CEPHALOSPORIN C BY CEPHALOSPORIUM-ACREMONIUM"</p> <p>BIO-TECHNOLOGY (NEW YORK), vol. 7, no. 5, 1989, pages 477-485, XP000026733</p> <p>ISSN: 0733-222X</p>	
A	<p>-----</p> <p>ULLAN R V ET AL: "A novel epimerization system in fungal secondary metabolism involved in the conversion of isopenicillin N into penicillin N in Acremonium chrysogenum"</p> <p>JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 277, no. 48, 29 November 2002 (2002-11-29), pages 46216-46225, XP002261579</p> <p>ISSN: 0021-9258</p> <p>-----</p>	